

*Cyp = 3-Cyclopentylpropionyl-

FIGURE 1

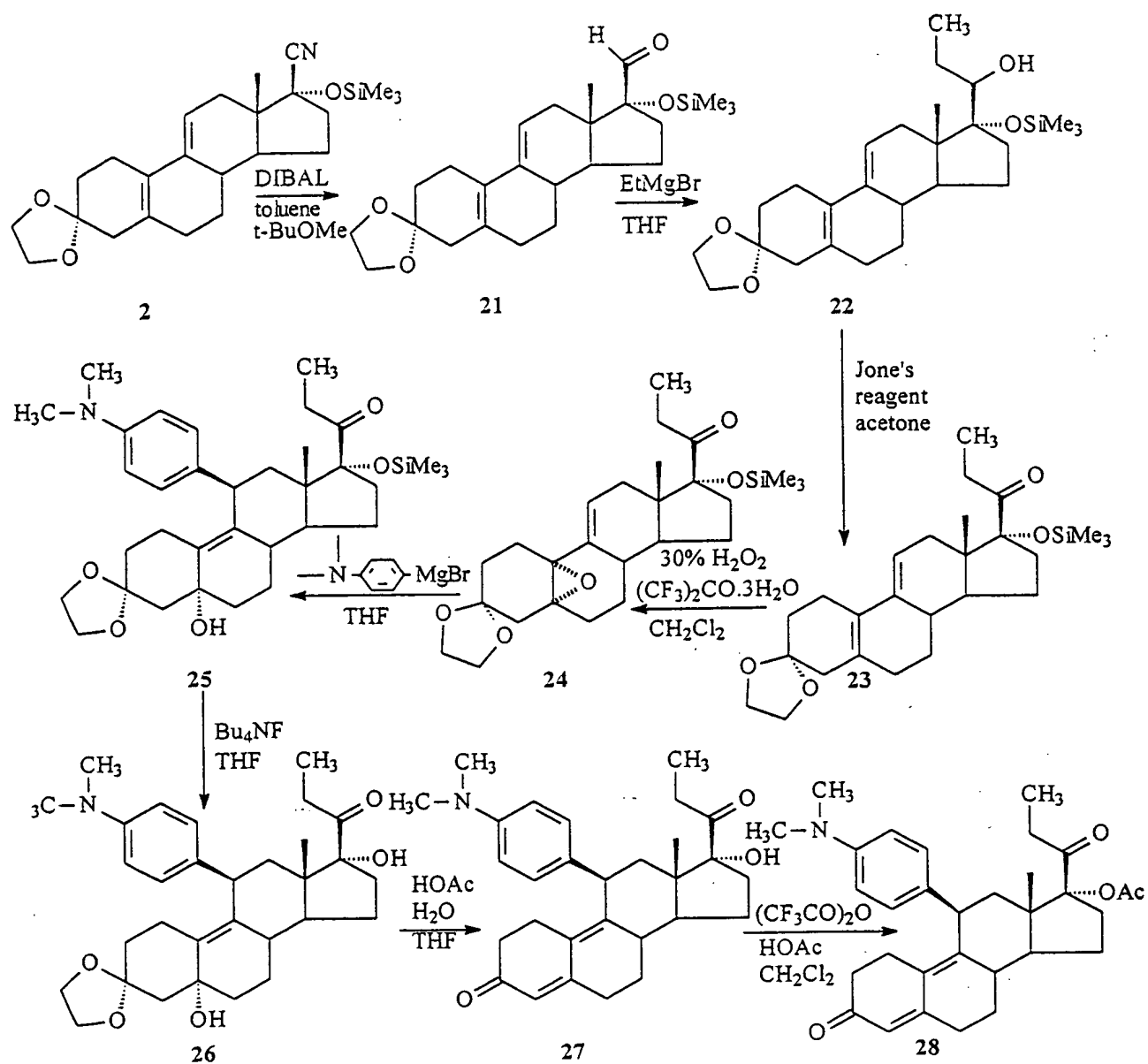


FIGURE 2

FIGURE 3

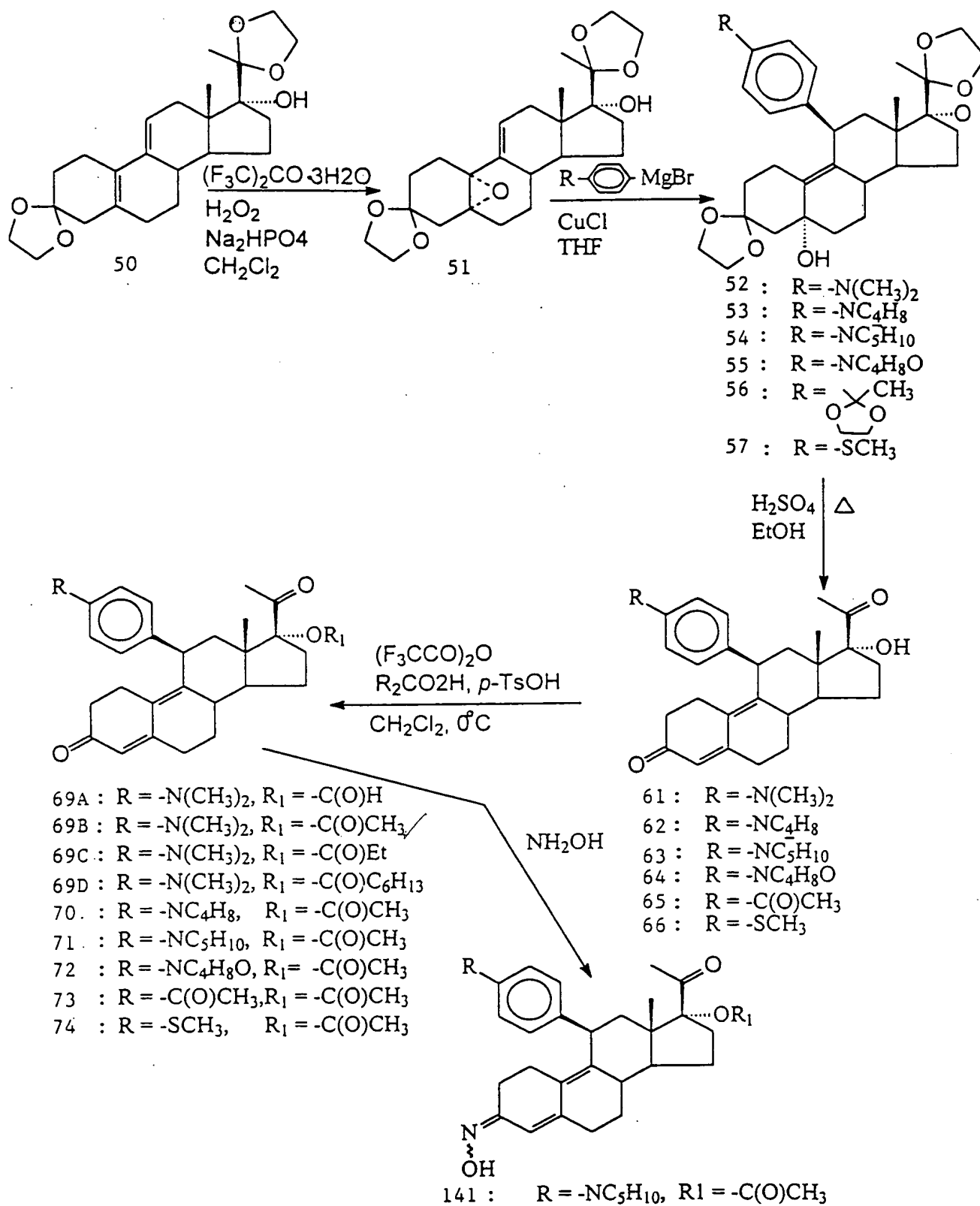
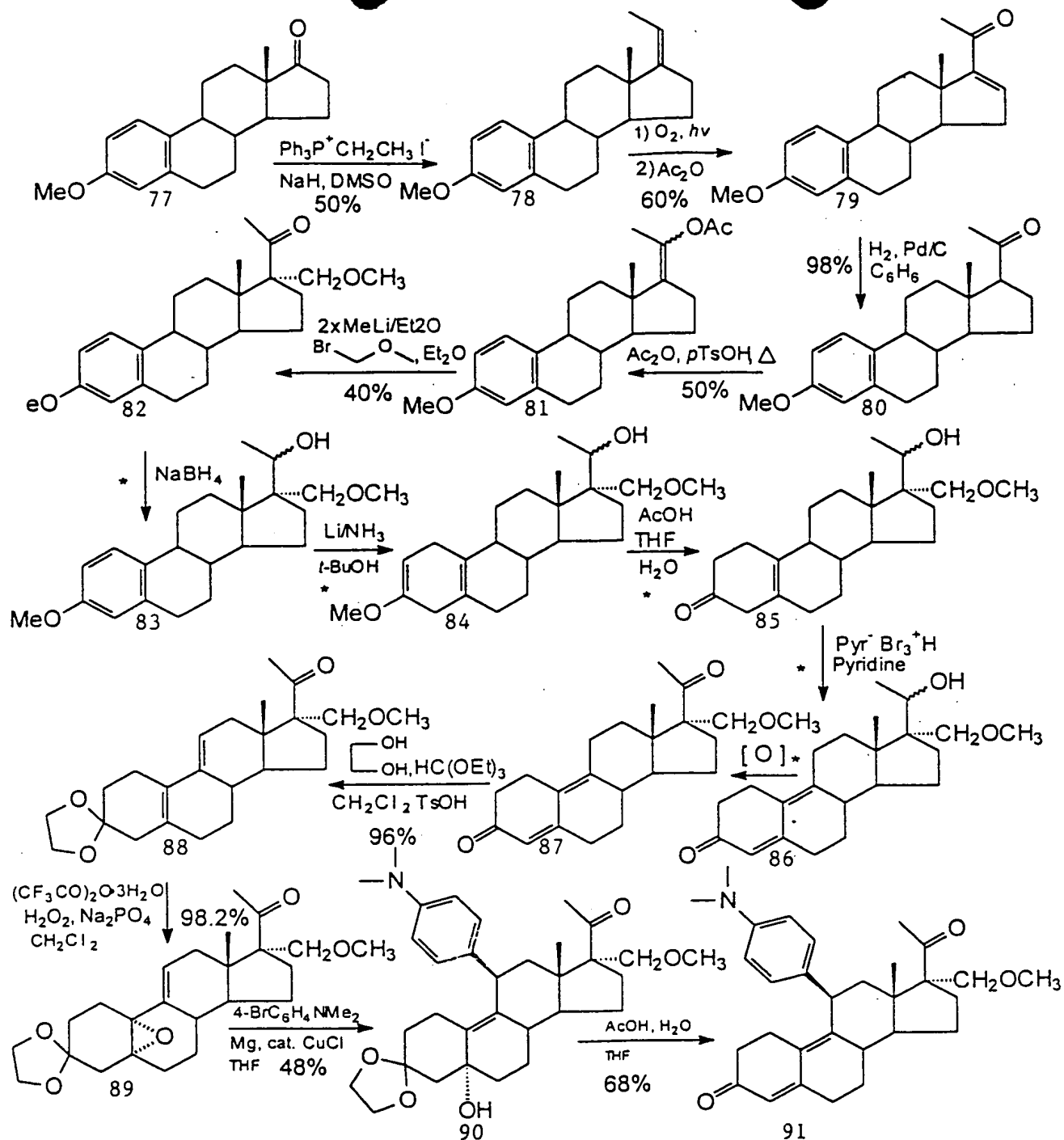


Figure 4



* Yield from 83 to 86 is 37%

Figure 5

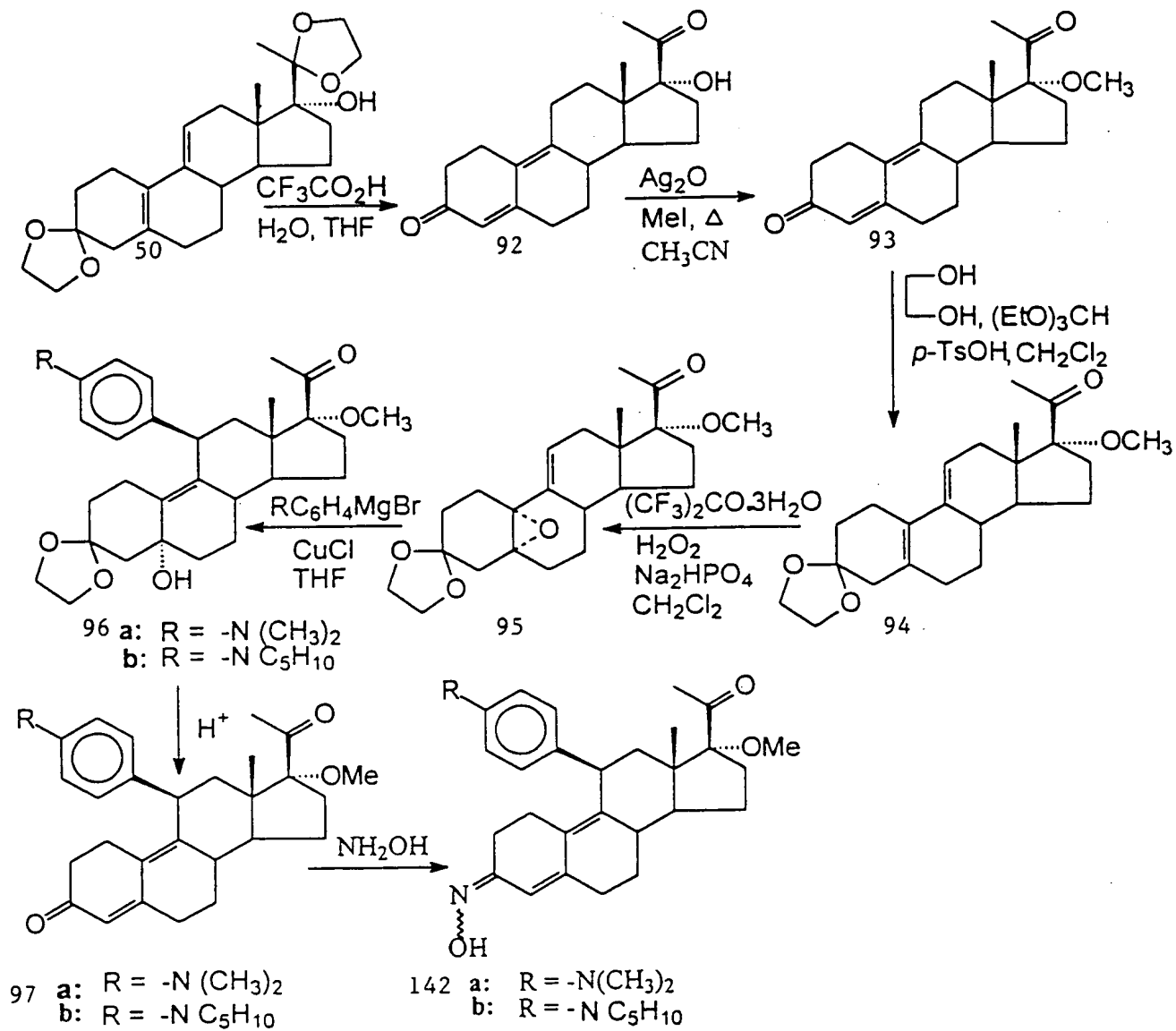


Figure 6

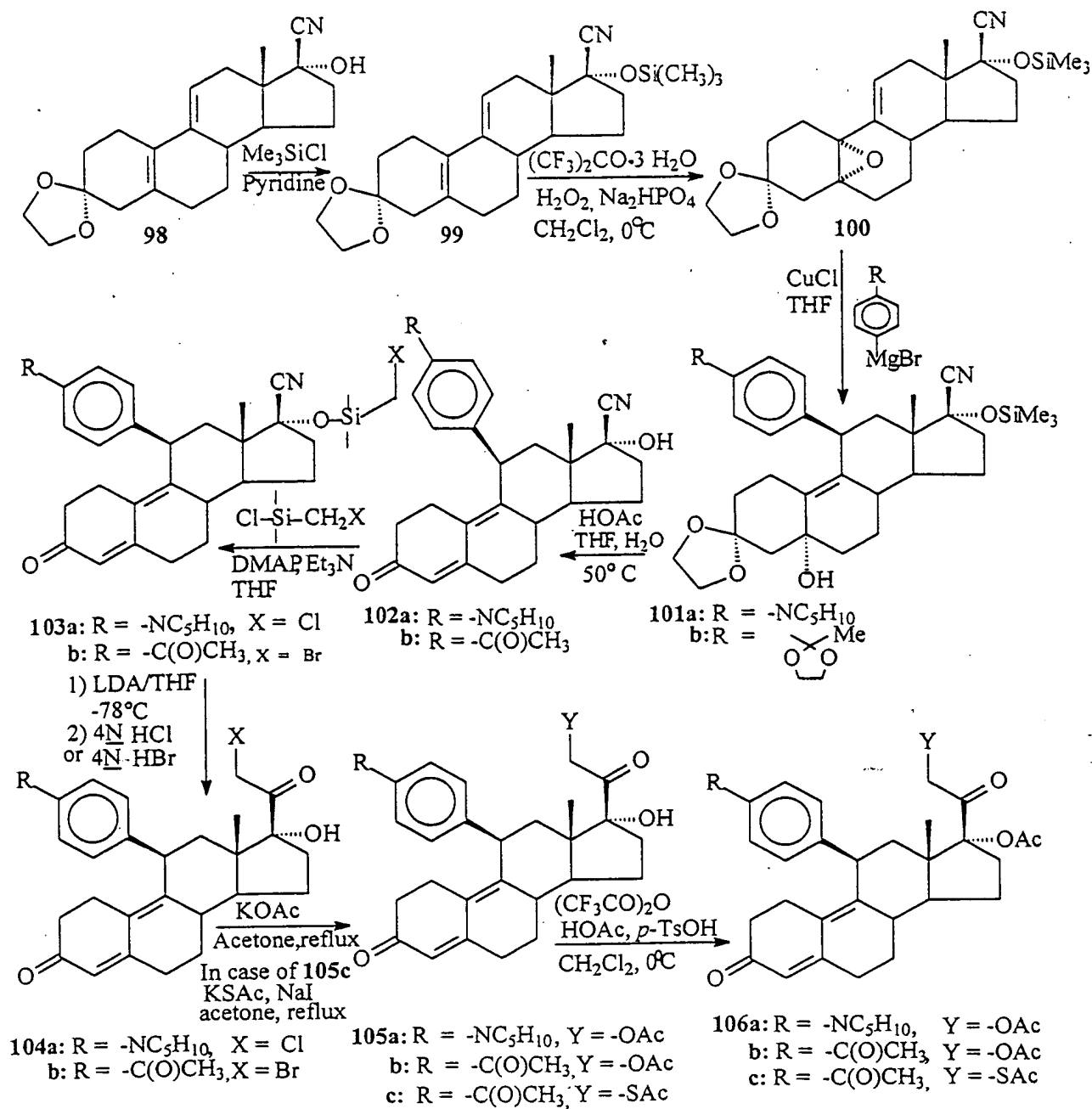


Figure 7

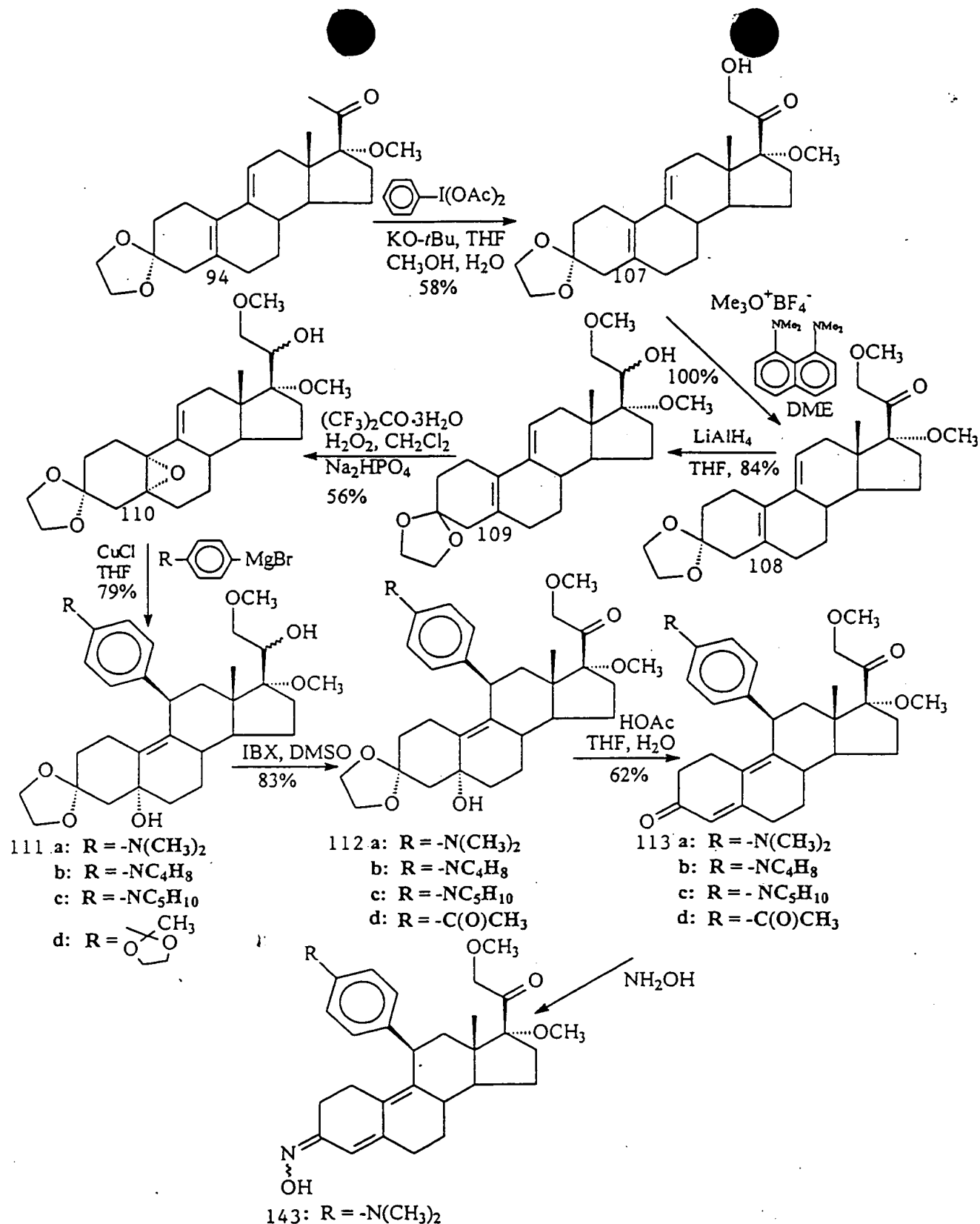


Figure 8

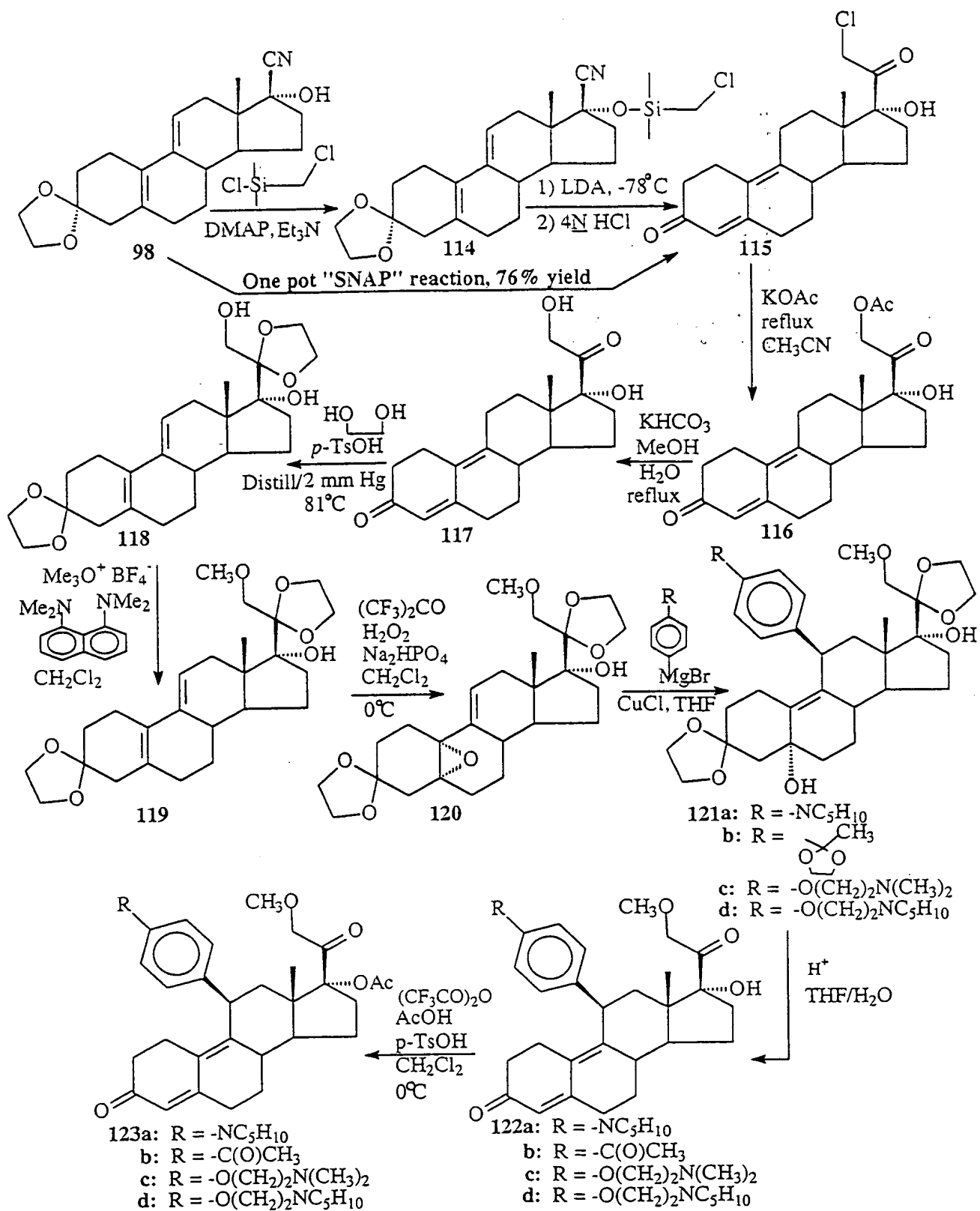


Figure 9

The reaction scheme illustrates the synthesis of compounds 139 and 140 from compound 124. The process begins with compound 124, which features a 4-(dimethylaminophenyl) group and a 1-hydroxy-2-oxoethyl side chain. Compound 124 is converted to 130 using $(\text{ClCH}_2\text{C}(=\text{O}))_2\text{O}$ in pyridine. Compound 130 is then treated with $(\text{CF}_3\text{CO})_2\text{O}$, HOAc, and tosic acid in CH_2Cl_2 at 0°C to yield 131. Compound 131 is converted to 132 using CH_3CN and NaI. Compound 132 is then treated with $(\text{CH}_3)_2\text{NH}$ in THF at 0°C to yield 133. Compound 133 is converted to 139 using HCO_2H and HClO_4 . Finally, compound 139 is converted to 140 using HCO_2H and HClO_4 .

Figure 10

Figure 11